

1. In computerized information systems data have to be managed.
 - a. Explain EACH of the following terms: (6 marks)
 - i. Field
 - ii. Record
 - iii. File
 - b. Draw a diagram to illustrate the distinction between a field, a record and a file. (3 marks)
 - c. In purchasing secondary storage media, a company should not only consider storage capacity but other factors as well. Discuss THREE other factors that the company ought to consider. (6 marks)
2. A spreadsheet package rather than a relational database, is used to store customer orders for birthday cakes. When a customer orders more than one cake for a given date, one worksheet will be generated for each cake ordered. No validation procedure is used when the data are entered. data for each record (a cake order) is as follows:
 - Customer
 - Address
 - Telephone Number
 - Date Order Required
 - Cake Weight
 - Cake type
 - Price
 - Comments
 - a. Describe TWO problems that may occur due to **storing** data in a worksheet (a flat file). (4 marks)
 - b. Discuss TWO problems that may occur due to the **lack of validation** when the data are entered. (4 marks)
 - c. State, with reasons TWO additional fields that may be added to the list of data that are captured. (4 marks)
3. At a recent conference on emerging technologies, a presenter made the two following statements.
 - i. **"In general, a file today is larger than a file twenty years ago".**
 - ii. **"In general, storage is cheaper today than it was twenty years ago".**
 - a. Examine EACH statement and explain, giving ONE example in each case, why the statement is valid. (6 marks)
 - b. The principal of a high school has implemented strategies for conserving paper in the school. Students are now required to submit their assignments in soft copy rather than on paper.
 - i. State THREE ways in which the assignment may be submitted in soft copy. (3 marks)

- ii. State **with reason** the MOST appropriate storage medium for students to use when submitting an assignment that consists of text and several pictures. The teacher has indicated that storage devices will not be returned to the student. (3 marks)
4. Explain, using a suitable example, the impact on an organization if research data is not available in a timely manner. (3 marks)